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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,305	01/11/2002	Hideki Sunaga	040679-1434	5514

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EXAMINER

NGUYEN, HANH N

ART UNIT PAPER NUMBER

2834

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,305

Applicant(s)

SUNAGA ET AL.

Examiner

Nguyen N Hanh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 and 15 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: "back surface 40b" in Page 22, lines 12,15,23 should be written as ---front surface 40b---

Appropriate correction is required.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character ""60C" in Fig. 9A has been used to designate both different sections of the fuse 60. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1,2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohi et al. in view of Harlan et al.

Regarding claim 1, Ohi et al. show a brushless motor comprising: a stator (40 in Fig. 4) comprising a plurality of exciting coils (38) which receives drive current; a rotor (5) rotatable relative to the stator; a first circuit (62 in Fig. 2 and 3) section; a second circuit section (61 in Fig. 2 and 3) comprising a control circuit for controlling the magnetic field generated by the stator by controlling the drive current; and a fuse member electrically connecting the wiring of the first circuit section and a wiring pattern of the second circuit section, the fuse member electrically disconnecting the wiring of the first circuit section and the wiring pattern when a temperature of the wiring pattern becomes higher than a predetermined temperature (Fig. 3 and claim 1). Ohi et al. fail to show a first circuit section comprising a filter circuit for eliminating surges of electric power for the drive current, a first circuit section being produced on a wiring metal piece and the second circuit section being produced on a printed wiring board.

However, Harlan et al. disclose a power supply circuit wherein a filter circuit is used for eliminating electric power surges (Fig. 1 and Col. 2, lines 35-45) for the purpose of protecting the circuit.

Since Ohi et al. and Harlan et al. are in the same field of endeavor, the purpose disclosed by Harlan et al. would have been recognized in the pertinent art of Ohi et al.

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It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Ohi et al. by using a filter circuit in the first circuit section for eliminating electric power surge as taught by Ohi et al. for the purpose of protecting the circuit.

Moreover, the limitations "a first circuit section being produced on a wiring metal piece and the second circuit section being produced on a printed wiring board" are given little patentable weight because the method of forming the device is not germane to the issue of patentability of the device itself.

Regarding claim 2, Ohi et al. also show the brushless motor wherein the fuse member is made of elastic and electro-conductive material, an end portion of the fuse member being fixed on the wiring piece of the first circuit portion, the other end portion of the fuse member being soldered with the wiring pattern by means of solder which melts at the predetermined temperature (Col. 6, lines 25-35 and Fig. 3).

Allowable Subject Matter

4. Claims 14-15 are allowed.
5. Claims 3-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show the drive control circuit comprising a first circuit section for eliminating surges of electric power and a second circuit section for controlling magnetic field generated by the stator by controlling drive current treated in

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the first circuit section, the first circuit section and second circuit section being arranged generally in parallel with a predetermined space therebetween; and a fuse member electrically connecting the first circuit section and the second circuit section, an end portion of the fuse member being welded with the first circuit section, the other end portion of the fuse member being soldered with second circuit section, the fuse member cutting an electrical connection between the first circuit section and the second circuit section when a temperature of a part of the second circuit section becomes higher than a predetermined temperature.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (703) 305-3466. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.



KARL TAMAI
PRIMARY EXAMINEE

HNN

July 5, 2003